

Cazenove Charity Lecture

John Kay

17th May 2016

This month, the Royal Institution hosted the third annual Cazenove Charities investment lecture. We were delighted to welcome Professor John Kay, the renowned economist, author and regular contributor to the Financial Times. His talk followed two main themes; investment uncertainty and long term decision making in endowment asset management, with his thesis challenging the perceived wisdom and suggesting that 'we make serious mistakes in describing risk in endowment management'.

John Kay is fortunate to have three different perspectives to draw experience from; as an influential academic; an individual involved in shaping public policy debates and as a Fellow and long term member of the investment committee at St John's College, Oxford. He believes that describing risk as volatility of capital value is bad for beneficiaries and for the economy. This mistaken conception has driven financial regulation and therefore the approaches of most providers of investment advice. In his view many advisors are overly focused on short term volatility, thereby skewing portfolios and investment decisions.

So how did defining risk as volatility become part of conventional wisdom? The answer lies with the evolution of portfolio management

theory. Economist Harry Markowitz introduced 'modern portfolio theory' in a 1952 essay, for which he was later awarded a Nobel Prize in economics. His theory described how, by combining assets, it was possible to benefit from diversification and get a better risk adjusted return. In this authoritative work, risk was described mathematically as the volatility of the portfolio value. This model forms the basis of much of the current advice given to endowments. It is also the origin of the derivatives and asset backed securities markets; with the boom that followed their introduction eventually leading to the credit crisis; and the value at risk metrics that spectacularly failed the banks in 2007.

John's first personal experience in share ownership came in the 1970s around the same time that the model portfolio theory was gaining recognition. Robb Caledon was a shipbuilding company based in Dundee. Although effectively bankrupt, there was a nationalisation bill going through Parliament which, if passed, would value the shares at £1. If the bill failed the shares would have been worth nothing. Applying his academic training to the dilemma, he estimated that the probability of success was 70%, suggesting a risk adjusted fair value of the shares at that moment of 70p. John bought the shares at 40p each. He had followed the process of appraising risk; by defining the possible outcomes, attaching probabilities to each outcome and making a rational decision based on this information.

However, there was an additional reason that could have influenced John's decision. If he had been fortunate enough to have other investments, the Robb Caledon shares could be held as a hedge, behaving differently to the rest of the market. If the bill were to fail, then the current Labour government was likely to lose power to the more business friendly Conservative government. Robb Caledon shares would be worthless, but the market would likely rise. In the opposite scenario Robb Caledon shares would create value, when the rest of the market was falling. This demonstrates a valuable lesson, that risk should be looked at in the context of the portfolio as a whole. Although a single holding in Robb Caledon might be described as risky, owning these shares as part of a portfolio actually lowered the risk.

It turns out that the bill was passed (by a majority of one vote) and John's first share ownership exploit was a happy introduction to the world of investment. But the theory that he had tested turned out to have a more limited application than he believed at the time. Models don't relate very well to the real world, as they tend to be based on history rather than applied current knowledge or business sense.

There are many examples where models are of limited real life use. These included a Professor of Decision Science, who was unable to make an important investment decision because 'this is serious'; or Markovitz himself investing his own investment portfolio.

"I should have computed the historical co-variances of the asset classes and drawn an efficient frontier. Instead, I visualized my grief if the stock market went way up and I wasn't in it—or if it went way down and I was completely in it. My intention was to minimize my future regret. So I split my contributions 50/50 between bonds and equities."

Harry Markowitz, quoted by Jason Zweig, *Your Money and Your Brain*.

People make decisions based on what is important to them. Risk is not objective or a number that is the same for everyone, but it is subjective and personal and should be defined as failing to meet your realistic objectives.

For endowments the main investment risk is not achieving a sufficient return over the long term to meet the charitable purposes. For a saver, the risk might be that the money doesn't stretch to a deposit on a house. For a fund manager the risk might be short term underperformance curtailing their career. Different investors have different perceptions of risk, creating an opportunity to trade with each other to mitigate your own personal risk.

For endowments looking for long term returns above inflation, the key dilemma becomes focused on how much to entrust to real assets. Safe assets such as cash and bonds are classified as low risk by their limited short term volatility. Real assets are likely to be more risky, according to short term volatility. So how to allocate? Using

probabilities, and some of the conventional assumptions of asset allocation models, there is an approximate probability of 60% that real assets outperform safe assets over one year (or 40% that they don't). However, extend this time horizon to 25 years and there is a 99% probability of real asset outperformance .

It is also clear from history that significant periods of real asset underperformance comes from unexpected events. As the Goldman Sachs banker David Viniar remarked in 2007 "We were seeing things that were 25-standard deviation events, several days in a row". But that is not what actually happened. When flipping a coin, 100 heads in a row is an equivalent statistical anomaly, or perhaps it would be more accurately explained by something that wasn't factored into the original equation.

We can't know what future will hold, and we can't be sure of the outcome, but the longer the time horizon the more likely we are to generate returns from real assets.

As a final example of how differing perspectives of risk can lead to opposite investment decisions, John talked about an office block in Washington State considered for the St John's College endowment. The location of this office block is within the Cascadia subduction zone, an area at risk of infrequent but large tectonic activity with serious consequences. Evidence of the last earthquake in this region has been gathered from native American legend, which speaks of a quarrel

between the land and sea dating from roughly the same time that a tsunami hit the coast of Japan in 1700. The average time between these tectonic events is 500 years, suggesting that another earthquake is likely in the next 200 years. Despite this, there are many companies that have chosen Washington State as their headquarters. This is perhaps explained by the statistics. The probability of tectonic activity occurring in one twenty year period is just 4%. But over twenty five twenty year periods the likelihood is much higher at 64%. Investors with shorter, 20 year time horizons, appraise the risk as low. The College with a time horizon stretching to many centuries gave consideration as to whether the risk was too high.

To conclude John gave six pieces of advice for successful endowment asset management

1. Think of risk as it affects the endowment and the beneficiaries.
Relative outperformance is not an advantage if markets are falling.
More important is long term returns over inflation.
2. Concentrate in real assets. Viewing risk as volatility confuses certainty with security. This creates a bias in investment portfolios away from real assets, seeking to dampen volatility, but underemphasising the best investments for the long term.
3. Mind your portfolio risk. Don't avoid risky investments, but build a diversified portfolio - both between and within wide asset class definitions.

4. Think for the long term. Although herd mentality creates correlation in the short term, endowments have the luxury of time which provides opportunities.

5. Pay less and minimise intermediation. Costs reduce returns.

Fees are the reason that there are no hedge funds in the St John's endowment.

6. Don't pull the plant up every few years to see how it is growing.

Find a good manager and let them get on with it.

Having set out to show how there are serious mistakes in describing risk in endowment management, John challenged us to take a long term approach unbiased by volatility. For us, as managers of charity investments, his thesis underlines the importance of understanding the individual circumstances of each charity client. Without that knowledge we are less likely to meet your objectives, or consider the right risks in appraising investment opportunities for you. Building up long term relationships and a close understanding of the organisation is key, and something we strive to achieve for all of our clients.